1999 Air Quality Highlights

Cooperative Development of Regulations

Involving the public in the process of making air quality rules helps to create fair, effective regulations that have broad support. In 1999, DNR continued its commitment to public participation by convening workgroups to help develop air regulations. A workgroup brings industry and the public together with government agencies to share concerns and exchange ideas while developing regulations.

The Construction Permit Streamlining Workgroup continued improving the Construction Permit Regulations and reviewing the internal procedures and policy for the program to review permit applications. After receiving recommendations, the Missouri Air Conservation Commission adopted the proposed amendment to the construction permit rule on July 29, 1999.

The department worked with leaders from industry, environmental organizations and local government to improve air quality in the Kansas City area. In June, DNR participated in the Kansas City Fuels Summit. Discussion focused on determining a motor vehicle fuel strategy to improve air quality in the Kansas City ozone maintenance area, which includes Johnson and Wyandotte counties in Kansas; and Clay, Jackson and Platte counties in Missouri.

Fuels

DNR continues to develop ways for St. Louis and Kansas City to reduce emissions of volatile organic compounds (VOCs) that contribute to the formation of ground-level ozone (smog). St. Louis is required to reduce VOCs due to its status as an ozone nonattainment area, while the Kansas City reductions are in response to violations of the ozone standard in 1995 and 1997.

In the St. Louis area, recovery of gasoline vapors at fuel pumps is one of the most effective ways to reduce VOC emissions. DNR developed the Missouri Performance Evaluation Test Procedures (MOPETP), a comprehensive set of tests designed to determine the efficiency of gasoline vapor recovery systems and components. In 1999, five manufacturers of gasoline dispensing equipment were either testing or preparing to participate in the MOPETP program. All gasoline dispensing facilities must have a MOPETP approved vapor recovery system installed in order to continue operation after Jan. 1, 2001.

DNR also continued the operating permit program for gas stations in the St. Louis area. The program requires vapor recovery equipment to be tested to assure it is functioning properly. About 980 active stations in the St. Louis ozone nonattainment area are subject to the operating permit rule. The initial permits were completed by Jan. 1, 1999.

Based on the proceedings of the St. Louis Fuel Summit held in 1998 and the governor's formal request to the U.S. Environmental Protection Agency (EPA), federal Reformulated Gasoline (RFG) was required at retail gasoline stations in the St. Louis ozone nonattainment area beginning

June 1, 1999. RFG has a gasoline formula designed to burn cleaner than conventional gasoline. RFG is required all year, not just during the summer. RFG reduces exhaust emissions as well as evaporative emissions and is administered and enforced by the EPA. In 1999, RFG requirements included a minimum 15 percent reduction in both VOC emissions and air toxic emissions compared to conventional gasoline. The requirements also prohibited any increase in Nitrogen Oxide (NOx) emissions. Phase II of the RFG program begins Jan. 1, 2000, and requires additional reductions in VOC and air toxic emissions as well as NOx emission reductions.

In 1999, the use of low Reid vapor pressure (RVP) gasoline was an important component of VOC emission reduction in Kansas City. During summer months, low RVP gasoline evaporates less than conventional gasoline, which reduces emissions of VOCs. Low RVP gas was first required in St. Louis in 1994 and in Kansas City in 1997. Low Reid vapor pressure gasoline was used in Kansas City from June 1 to Sept. 15, 1999.

Following the Kansas City Fuel Summit, on July 28, 1999, the governors of both Missouri and Kansas submitted letters requesting that the EPA require federal Reformulated Gasoline (RFG) for the Kansas City ozone maintenance area. However, a lawsuit was filed against the EPA blocking the use of federal RFG in former nonattainment areas, including Kansas City.

Gateway Clean Air Program

Efforts to bring St. Louis into attainment with the EPA's ozone regulations shifted gears in 1999 with the launch of the Gateway Clean Air Program (GCAP). The new emissions testing program is an important component in Missouri's ongoing effort to ensure clean air in the St. Louis area. In 1994, high levels of air pollution in St. Louis prompted the Missouri General Assembly to change the vehicle emissions testing program. Beginning in 2000, vehicles in St. Louis City and St. Louis, St. Charles and Jefferson Counties will be using a new enhanced emissions testing program. For the first time, Franklin County will begin using an improved basic idle emissions test.

DNR contracted with Environmental Systems Products Inc. (ESP Missouri), to implement GCAP. ESP Missouri will construct and operate the new vehicle emissions testing facilities and also operate remote sensing monitors. Facility construction began in 1999. These new facilities will begin testing vehicles in April 2000. Motorists will also have the opportunity to have their vehicles tested by remote sensing RapidScreen in early 2000. More information on GCAP is available in the *Controlling St. Louis Ozone* section on page 19.

Ozone Transport

Because air pollution can spread across geographic boundaries, initiatives involving regional cooperation and study of air quality are becoming more common. In October 1998, the EPA issued a rule that would require Missouri to reduce emissions of NOx, which is a commonly transported air pollutant contributing to ozone formation. In 1998, DNR began development of regulations to comply with the EPA's regional NOx control plan. These regulations would affect utilities, cement kilns and other large industrial activities. The U.S. Court of Appeals has issued a stay of implementation for these rules.

Litigation Blocks Eight-Hour Standard

New federal standards adopted in 1997 to reduce ground-level ozone were blocked by litigation in 1999. The new ozone standard, known as the eight-hour standard, would have reduced allowable ozone concentrations from 0.12 parts per million averaged over a one-hour period to a standard of 0.08 parts per million averaged over an eight-hour period. Under this new standard, attainment would have been determined based upon an average of three years of the fourth highest annual daily maximum eight-hour concentration.

In 1997, states began gathering data for the EPA eight-hour standard. The EPA was scheduled to assign area designations in 2000 based on the new eight-hour standard, although the one-hour standard was still to be in effect in areas that had not attained it.

However, in May 1999, a three-judge panel in the District of Columbia Circuit Court determined that the EPA did not have authority to implement this more stringent standard. In October 1999, the U.S. Court of Appeals for the District of Columbia Circuit denied the EPA's request for a rehearing on this decision. The EPA plans to appeal the decision to the U.S. Supreme Court. As 1999 closed, the EPA proposed to reinstate the one-hour ozone standard to ensure that some type of control would remain in place. The eight-hour standard is still being reported so that the EPA can keep the public informed regarding air quality in their area, although the standard can't be implemented until a resolution is reached.

Operating Permits

Missouri's Operating Permit Unit remained one of the nation's permit leaders. In 1999, the unit's focus turned to issuing Part 70 (major) permits. The unit issued 102 Part 70 permits, eight Intermediate permits and 82 Basic permits. In 1999, Missouri issued more major source operating permits than any other state in our EPA region. Missouri ranks in the top third of all permitting agencies in the number of permits issued.

Construction Permits

Among the 1134 construction permit actions completed in 1999, notable major level permits were issued for Fort Leonard Wood, Empire District Electric in Joplin, the Associated Electric St. Francis Power Plant, and the Utilicorp United Power Plant in Pleasant Hill.

Fort Leonard Wood

In October 1999, the APCP issued a Prevention of Significant Deterioration (PSD) permit to Fort Leonard Wood and the U.S. Army Engineer Center in Pulaski County. This permit allows Fort Leonard Wood to include the sources related to the Base Realignment and Closure activities that were not incorporated into the original permit. This permit also provides additional flexibility in training personnel with respect to meteorological conditions, or days of training, and the use of alternative equipment to generate fog.

APCP received the permit application in November 1998. The program completed preliminary review of the project on July 25, 1999. After reviewing comments from the public, the PSD permit was issued on Oct. 1, 1999. The final modeling analysis for the project showed no exceedances of the PM_{10} National Ambient Air Quality Standards (NAAQS) particulate matter less than 10 microns in diameter.

The Missouri Coalition for the Environment appealed the new Fort Leonard Wood PSD permit on Oct. 28, 1999. The appeal was referred to the Missouri Air Conservation Commission and the appeal process is proceeding.

Enforcement Actions and Results

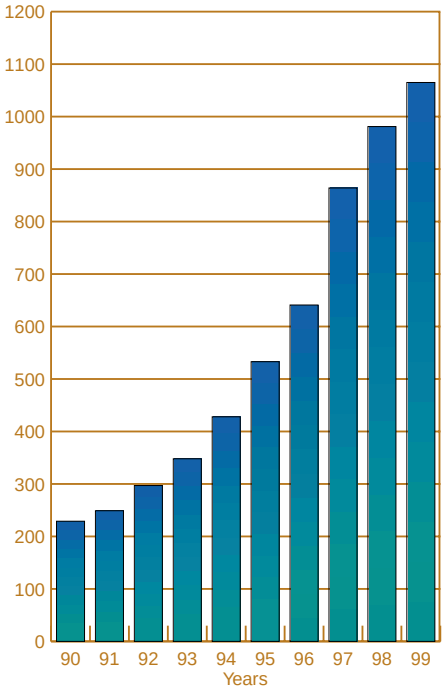
The Air Pollution Control Program performed 1,544 stationary source inspections in the 1999 calendar year. The program also issued 1,135 Notices of Violation (NOVs) in 1999. Settlements were reached in 146 cases. These settlements resulted in paid penalties of $261,418 and suspended penalties totaling $264,315. The department referred 22 cases to the Attorney General's office.

Charcoal Kilns

In July 1999, initial tests showed that significant progress has been made in reducing emissions from charcoal kilns. After decades of dense, moist, choking smoke rising up from more than 229 charcoal kilns in Missouri, control devices are being put in place to reduce these emissions.

In March 1998, after months of negotiations between DNR, the EPA and the charcoal industry, the Missouri Air Conservation Commission MACC) adopted a regulation to phase in controls of charcoal kiln smoke. This regulation requires each charcoal production facility to install afterburners on at least two kilns every year, or remove these kilns from production. The four largest

Construction Permits Issued by Air Pollution Control Program 1990-1999



charcoal companies were required to install more controls on an accelerated schedule.

Royal Oak Enterprises built the first charcoal kiln afterburners and installed them at their plant near Mountain View. The first one was ignited Dec. 7, 1998, and three afterburners were later installed to control 12 kilns. The improvement in air quality was so dramatic that some Mountain View residents thought the plant had shut down because the smoke had disappeared. A test supervised by DNR in July 1999 showed that the afterburners now easily meet the emission limits established by the charcoal rule. The pictures above show the difference between charcoal facilities with these controls and those without.

The Small Business Compliance Advisory Committee

Section 507 of the 1990 Clean Air Act Amendments requires states to implement a three-component program to assist small businesses in complying with the air regulations. This is commonly called the small business assistance program. The three components consist of the small business ombudsman, the technical assistance function to small businesses and the compliance advisory panel. In Missouri, the compliance advisory panel is known as the Small Business Compliance Advisory Committee (SBCAC).

The SBCAC is comprised of seven members: Two are appointed by the governor, one each is appointed by the majority and minority leaders of the House and Senate, and one is appointed by the director of the Department of Natural Resources. The SBCAC has the following responsibilities:

- Receive reports of the small business ombudsman of the governor's office;
- Evaluate the impact of the Air Conservation Law and related rules on small business;
- Review and assess the impact of enforcement policies on small business operations;
- Recommend to DNR, the MACC and the General Assembly changes in procedure, rule or law that would facilitate small business compliance with the Air Conservation Law;
- Recommend to the MACC rules for expedited review of modifications for small business;
- Conduct hearings, determine facts and make investigations consistent with the purposes of the small business technical assistance activity conducted under Section 643.173 (RSMo).

Currently there are four individuals serving on the SBCAC: Bruce Morrison, chairman, St. Louis; Jack Lonsinger, vice-chairman, Excelsior Springs; Joel Braun, Fenton; Caroline Pufalt, St. Louis; and Walter Pearson of DNR. The committee began meeting in 1998 to become familiar with the environmental issues that small businesses face.

The small business technical assistance activity is performed in the Technical Assistance Program (TAP), a non-regulatory service of DNR. TAP's business assistance unit carries out the activities and provides administrative support to the SBCAC. TAP's mission is to provide information, assistance, education and training to business owners, farmers, local governments and the general public on how to control or reduce pollution. For more information, you can contact DNR's Technical Assistance Program at 1-800-361-4827 or (573) 526-6627.